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REMARKS

Status of the Claims

Pending claims

Claims 1 to 33 are pending.

Claims added and canceled in the instant amendment

In the present response, new claims 34 to 38 are added, and claims 2 to 3, 14, 17 to 25, 27, and 32, are canceled, without disclaimer or prejudice. Thus, after entry of the instant amendment, claims 1, 4 to 13, 15, 16, 26, 28 to 31 and 33 to 38, will be pending and under examination.

Applicants respectfully request entry of the amendments set forth in this response under 37 CFR §1.116. The amendment places the case in condition for allowance and places the case in better condition for appeal; the amendment does not raise any issues of new matter; and, the amended claims do not present new issues requiring further consideration or search.

Allowable subject matter

Applicants thank the Examiner for finding that claim 33 is allowed, and claims 4, 14 and 16 appear to be allowable over the prior art but are objected to because they depend on a rejected base claim.

Outstanding Rejections

Claim 30 is rejected under 35 U.S.C. §112, second paragraph. Claims 3 15, 18 to 24, 26 and 27 remain rejected under 35 U.S.C. §112, first paragraph, written description requirement. The rejection of claims 1 to 3, 5 to 13, 15 and 17 to 27 is maintained and claims 28 to 32 are newly rejected under 35 U.S.C. §112, first paragraph, enablement requirement.

Applicants respectfully traverse all outstanding objections to the specification ε nd rejection of the claims.

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Support for the Claim Amendments

The specification sets forth an extensive description of the invention in the amended claims. For example, support for methods for hydrolyzing α-glycosidic bonds capable of being hydrolyzed by a polypeptide having an α-galactosidase activity comprising contacting a compound having the α-glycosidic bond with an effective amount of a polypeptide having at k ast a 95% or 97% amino acid identity to an amino acid sequence set forth in SEQ ID NO:4, having at least a 95% or 97% amino acid identity to an amino acid sequence as set forth in amino acids 1 to 364 of SEQ ID NO:4, or enzymatically active fragments thereof, wherein the polypeptide has α galactosidase activity can be found, inter alia, in on page 6, lines 7 to 21; page 10, lines 7 to 11; page 12 lines 6 to 10, of the specification. Accordingly, no new matter has been added and the amendment can be properly entered.

Objections to the Claims

The Patent Office objected to claims 22 to 24, 28, 29, 31. The instant at rendment addresses this issue.

Issues under 35 U.S.C. §112, second paragraph

Claim 30 is rejected under 35 U.S.C. §112, second paragraph. The instent amendment addresses this issue.

Issues under 35 U.S.C. §112, first paragraph

Written Description

Claims 3, 15, 18 to 24, 26 and 27 remain rejected under 35 U.S.C. §112 first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors at the time the application was filed had possession of the claimed invention ("written description requirement").

The Patent Office notes that the specification discloses the structure of the alphagalactosidase of SEQ ID NO:4.

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Applicants respectfully submit that the claimed invention is sufficiently described in the specification so that one of ordinary skill in the art would be able to ascertain the scope of the claims with reasonable clarity and recognize that Applicants' were in possession of the claimed invention at the time of filing. Applicants respectfully submit that describing a gen is of polynucleotides in terms of physico-chemical properties (e.g., a % sequence identity or stringent hybridization to an exemplary nucleic acid, e.g., SEQ ID NO:4) and function (e.g., mooding a polypeptide having alpha-galactosidase activity) satisfies the written description requirement of section 112, first paragraph. Applicants respectfully submit that the pending claims meet the written description requirement under 35 U.S.C. §112, first paragraph, for reasons set forth in Applicants previous responses, which are expressly incorporated herein.

However, merely to expedite prosecution and allowance of this application, claims 2 to 3, 14, 17 to 25, 27, and 32, are canceled, without prejudice or disclaimer. The claims were amended without prejudice or disclaimer to be directed to methods for hydrolyzing α-glycosi lic bonds comprising, inter alia, contacting a compound having the α-glycosidic bond with a polypeptide having at least 95% (from 70%) amino acid identity to SEQ ID NO:4. Also, allowable pending claims were amended to incorporate limitations of their base claims and/or to be dependent on allowable claims, or incorporate limitations of allowable claims.

Accordingly, in light of the above remarks, Applicants respectfully subn it that the pending claims meet the written description requirements under 35 U.S.C. §112, fir a paragraph.

Enablement

The rejection of claims 1 to 3, 5 to 13 and 15 is maintained and claims 1 to 27 are newly rejected under 35 U.S.C. §112, first paragraph, as allegedly not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention ("enablement requirement").

The Patent Office states that the specification is enabling for a method fc r hydrolyzing α -glycosidic bonds by using the α -galactosidase of SEQ ID NO:4 (please see section 11 of the office action).

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Applicants respectfully maintain that the specification enabled the skille I artisen at the time of the invention to identify, and make and use, a genus of alpha galactosidases to practice the claimed invention. Applicants respectfully submit that the pending claims meet the enablement requirement under 35 U.S.C. §112, first paragraph, for reasons set forth in Applicar ts previous responses, which are expressly incorporated herein.

However, merely to expedite prosecution and allowance of this application, claims 2 to 3, 14, 17 to 25, 27, and 32, are canceled, without prejudice or disclaimer. Claims were amended without prejudice or disclaimer to be directed to methods for hydrolyzing α-glycosi lic bonds comprising, inter alia, contacting a compound having the α-glycosidic bond with a polypeptide having at least 95% (from 70%) amino acid identity to SEQ ID NO:4. Also, allowable pending claims were amended to incorporate limitations of their base claims and/or to be dependent on allowable claims, or incorporate limitations of allowable claims.

Applicants respectfully submit that the pending claims meet the enabler ent recuirement under 35 U.S.C. §112, first paragraph. In light of the above remarks, Applicants re: pectfully submit that the specification sufficiently described how to make and use the claimed methods to satisfy the requirements of 35 U.S.C. §112, first paragraph. Accordingly, Applicants respectfully submit that the pending claims meet the written description and enablement requirements under 35 U.S.C. §112, first paragraph, and that this rejection can be properly withdrawn.

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CONCLUSION

In view of the foregoing amendment and remarks, Applicants respectful y aver that the Examiner can properly withdraw the rejection of the pending claims under 35 U.S.C. §112, first paragraph. Applicants respectfully submit that all claims pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early late is respectfully requested.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees cue in connection with the filing of this document to Deposit Account No. 03-1952 referencing docke: no. 564462000312. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

As noted above, Applicants have requested a telephone conference with the undersigned representative to expedite prosecution of this application. After the Examiner has neviewed the instant response and amendment, please telephone the undersigned at 858 720 5133.

Dated: January 24, 2005

Respectfully submitted

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